

Title (en)  
Electromagnetic relay

Title (de)  
Elektromagnetisches Relais

Title (fr)  
Relais électromagnétique

Publication  
**EP 2899732 A3 20150826 (EN)**

Application  
**EP 14190082 A 20141023**

Priority  
KR 20140000611 U 20140127

Abstract (en)  
[origin: EP2899732A2] An electromagnetic relay includes a housing; a fixed contact provided within the housing; a movable contact disposed within the housing so as to be contactable to and separable from the fixed contact; a driving unit configured to drive the movable contact, and including a shaft having one end connected to the movable contact and a compression spring for applying an elastic force to the movable contact so as to be in contact with the fixed contact; and an arc protector including an arc shielding portion for shielding an arc, and a compression spring support portion formed to protrude from the arc shielding portion to support the compression spring, the compression spring support portion comprising a shaft accommodating portion for accommodating the shaft therein. Under such configuration, the number of required components can be reduced and generation of a gap can be prevented.

IPC 8 full level  
**H01H 9/30** (2006.01); **H01H 50/34** (2006.01)

CPC (source: CN EP KR US)  
**H01H 9/30** (2013.01 - EP US); **H01H 50/04** (2013.01 - CN); **H01H 50/10** (2013.01 - US); **H01H 50/305** (2013.01 - US);  
**H01H 50/34** (2013.01 - EP US); **H01H 50/38** (2013.01 - KR); **H01H 50/54** (2013.01 - CN); **H01H 50/56** (2013.01 - KR);  
**H01H 50/645** (2013.01 - CN)

Citation (search report)  
• [X] EP 2637190 A1 20130911 - NGK SPARK PLUG CO [JP]  
• [X] EP 2267746 A1 20101229 - PANASONIC ELEC WORKS CO LTD [JP]  
• [A] US 2013063232 A1 20130314 - TAKAYA KOUETSU [JP], et al

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 2899732 A2 20150729; EP 2899732 A3 20150826; EP 2899732 B1 20180919; CN 104810207 A 20150729; CN 104810207 B 20170412;**  
ES 2701190 T3 20190221; JP 2015141894 A 20150803; JP 5990240 B2 20160907; KR 200486560 Y1 20180607; KR 20150003009 U 20150805;  
US 2015213980 A1 20150730; US 9496109 B2 20161115

DOCDB simple family (application)  
**EP 14190082 A 20141023; CN 201510019167 A 20150114; ES 14190082 T 20141023; JP 2014233926 A 20141118;**  
KR 20140000611 U 20140127; US 201414521123 A 20141022